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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/621,232 | 07/15/2003 | Christopher W. Smith | 01-02a | 1201 |

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| EXAMINER | |
|---|---|
| HOOK, JAMES F | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3754 | |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/621,232 | SMITH ET AL. | |
| | Examiner | Art Unit | |
| | James F. Hook | 3754 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Terminal Disclaimer*

The terminal disclaimer filed on November 19, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,591,871 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### *Claim Rejections - 35 USC § 112*

Claim 2 recites the limitation "said polyalkylene polybutylene terephthalate" in line 2. There is insufficient antecedent basis for this limitation in the claim.

It is noted that the arguments of the amendment filed on November 19, 2004 seem to suggest that claim 1 is reciting a pipe formed completely of only one layer, however, the language of the claim is only describing the contents of a single layer, and such seems consistent with the fact that claim 2 and other claims add additional layers to the layer of claim 1 which suggests that the applicants tubular structure is more than one layer. At this time, it appears to the examiner that the language of claim 1 does not limit the entire invention to only one layer especially in light of the dependent claims, however, should applicant amend to try and claim a single layer pipe only, then claim 2 as well as other claims reciting further layers in addition to the pipe of claim 1 may create a rejection under 35 USC 112 at that time, however, at this time such is not required. The following rejection is based on this understanding that the single layer claimed in claim 1 consists essentially of a specific material, and not that the entire

tubular structure consists essentially of the one layer, especially in light of claim 2 which adds more layers to the tubular structure.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 8-13, 18-21, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito (330). The reference to Ito discloses the recited tubular structure for use with fuel systems which inherently has impereability properties where the tubular structure comprises using a polyalkylene terephthalate or naphthalate such as polybutylene terephthalate , the inner layer can be formed of a single or multiple layers where elemental carbon or carbon black can be used to provide the inner layer with static dissipating properties, and where a protective cover layer can be provided which can be made of a polyolefin such as polypropylene or polyamides such as nylons, and the use of the tube for connecting to a fuel filler funnel is considered intended use.

Claims 1-3, 8, 9, 11-13, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Stieler. The reference to Stieler discloses the recited tubular structure for use with fuel systems and vapor recovery which inherently has impereability properties

where the tubular structure comprises using a polybutylene terephthalate , the inner layer can be formed of a single or multiple layers where elemental carbon or carbon black can be used to provide the inner layer with static dissipating properties, and where a protective cover layer can be provided which can be made of a polyolefin such as polypropylene or polyamides such as nylons, the tube can be made of one or more layers, corrugations can be provided, and the use of the tube for connecting to a fuel filler funnel is considered intended use.

Claims 1-3, 8, 9, 11-13, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Brunnhofer. The reference to Brunnhofer discloses the recited tubular structure for use with fuel systems which inherently has impereability properties where the tubular structure comprises using a polyalkylene terephthalate or naphthalate such as polybutylene terephthalate ,the inner layer 1 can be formed of a single or multiple layers, and where a protective cover layer 2 can be provided which can be made of a polyolefin such as polypropylene or polyamides such as nylons, and the use of the tube for connecting to a fuel filler funnel is considered intended use.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 5, 14, 15, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Walsh. The reference to Ito discloses all of the recited

structure with the exception of using chlorinated polyolefins such as chlorinated polyethylene for the outer layer. The patent to Walsh discloses a fuel tube comprising an inner layer 12 which can be made conductive and a protective layer 14 which can be made of chlorinated polyolefins of which polyethylene and polypropylene are known polyolefins. It would have been obvious to one skilled in the art to modify the cover layer of Ito to be formed of a chlorinated polyolefin as suggested by Walsh as such is another type of material used for cover layers which has different and improved properties.

Claims 4, 5, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunnhofer in view of Walsh. The reference to Brunnhofer discloses all of the recited structure with the exception of using chlorinated polyolefins such as chlorinated polyethylene for the outer layer. The patent to Walsh discloses a fuel tube comprising an inner layer 12 which can be made conductive and a protective layer 14 which can be made of chlorinated polyolefins of which polyethylene and polypropylene are known polyolefins. It would have been obvious to one skilled in the art to modify the cover layer of Brunnhofer to be formed of a chlorinated polyolefin as suggested by Walsh as such is another type of material used for cover layers which has different and improved properties.

Claims 6, 7, 16, 17, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Kawazura. The patent to Ito discloses all of the recited structure with the exception of providing a tie layer to connect the inner and outer layers formed of anhydride modified linear low density polyethylene. The patent to Kawazura

discloses that it is old and well known to provide a connective or tie layer made of anhydride modified linear low density polyethylene to connect inner and outer layers made of different materials including PBT and PBN. It would have been obvious to one skilled in the art to modify the hose in Ito by providing a tie layer formed of anhydride modified linear low density polyethylene to connect the PBT or PBN layer to other material layers as suggested by Kawazura to prevent delamination and thereby save repair or replacement costs.

Claims 6, 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunnhofer in view of Kawazura. The patent to Brunnhofer discloses all of the recited structure with the exception of providing a tie layer to connect the inner and outer layers formed of anhydride modified linear low density polyethylene. The patent to Kawazura discloses that it is old and well known to provide a connective or tie layer made of anhydride modified linear low density polyethylene to connect inner and outer layers made of different materials including PBT and PBN. It would have been obvious to one skilled in the art to modify the hose in Brunnhofer by providing a tie layer formed of anhydride modified linear low density polyethylene to connect the PBT or PBN layer to other material layers as suggested by Kawazura to prevent delamination and thereby save repair or replacement costs.

### *Response to Arguments*

Applicant's arguments filed November 19,2004 have been fully considered but they are not persuasive. With respect to the arguments, such are directed essentially

solely to the limitations found in the independent claims and which are rejected under various references under 35 USC 102. The basis of the argument is that the independent claims claim a tubular structure which "consists essentially of" PBT or PBN which excludes references to more than one layer, however, as mentioned above the language of the independent claims describes a tubular layer which consists essentially of PBT or PBN which has an inner and outer surface. The references to Ito (330), Stieler, and Brunnhofer disclose a single layer that meets this limitation which is all that the claim requires, where the claims do not require only one layer, and also do not suggest that the inner and outer surfaces are the innermost an outermost, therefore, the inclusion of additional layers still meets the claim language especially in light of claim 2 which adds additional layers to the layer of claim 1 thereby forming a multilayer structure the same as the references teach. It is noted, however, that there is prior art which teaches tubes can be made of single layers, or multiple layers as needed, and such may not be allowable should applicant correct the language of the claims to only recite a tube of a single layer of a single material. With respect to the inclusion of carbon black, such is merely an additive, and it is considered that such would not change the material used, specifically such would still be PBT or PBN, regardless of other additives, and in addition Ito which preferably contains carbon black does not suggest it must be used. Applicants use of consisting essentially of to attempt to exclude additives or impurities is not persuasive where the claim language does not set forth a positive limitation that additives are excluded also, such as "free of carbon black" or some such terminology. As known in the art, various additives are applied to plastic

materials and unless specifically set forth, it can be assumed that such additives are capable of being in the layer or excluded as needed by the user. Until such is positively recited as a claim limitation it is considered that the term consisting essentially of would not exclude specific additives which are known as being used with specific materials and is specific intended uses for the tubes. With respect to Stieler, such only sets forth that carbon black may be used, however does not require it, therefore as set forth above consisting essentially of does not exclude more than one layer, and the layer taught by Stieler is made of PBT which meets the claim language. With respect to Brunnhofer, the same is true with regards to it's teaching of more than one layer, and is not persuasive with regards to the addition of carbon black where Brunnhofer does not require carbon black be added to the PBT layer, therefore such is not an argument supported by the prior art when Brunnhofer does not suggest what applicant states it does. With respect to the rejections under 35 USC 103, there are no additional arguments directed toward the combination of references, only a suggestion that such stand or fall based upon the alleged shortcomings of the base references, which were discussed above, and believed to still read on the claims as set forth above. Therefore, it is apparent that applicant concedes the appropriateness of the combination of references. With respect to the allowability of the parent case, such was not based upon the use of PBT or PBN in a hose, but the combination of such with a filler funnel made of the same type of material, or other limitations and steps that were not found in the prior art, the examiner did not find the use of PBT or PBN in hoses to be novel.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Katayama (960 and 185), Ito (085 and 312), Morohoshi, Yamada, Ward, and Iio (313) disclosing state of the art multilayer and single layer hoses.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James F. Hook
Primary Examiner
Art Unit 3754

JFH